REMARKS

A comparison between the pending claims and the claims as amended is set forth in the attached Appendix.

Applicants have amended claims 3 and 41 to expedite prosecution in this matter. This amendment is supported at various spots throughout the specification. See particularly page 36, line 15. Claim 12 was rewritten in independent form. As such this amendment does not constitute new matter and its entry is respectfully requested.

Applicants appreciate the Examiner's indication that claims 2, 4, 12, 39, 40, 42, 43, 44 and 45 are allowed.

Claims 3, 5, 6, 8, 9, 41, 48 and 49 were rejected under 35 USC 102(b) as being anticipated by Lage et al.

Applicants note that the protein and its corresponding nucleic acid is substantially different from applicants' claims MSH5 protein and corresponding nucleic acid. However, the Examiner found an incidental 17 nucleotide fragment that corresponds to one fragment in SEQ ID NO:1. In order to expedite prosecution, claims 3 and 41 have been amended and this amendment obviates this rejection. Accordingly, the rejection should be withdrawn.

Claim 10 was rejected under 35 USC 102(b) as being anticipated by Promega catalog, pg. 166.

Applicants respectfully submit that this rejection should be withdrawn for the following reasons.

The kit of claim 10 specifies that the primers are selected from isolated nucleotide segments of claim 3. The Examiner has inter alia acknowledged that the primers of Promega in no way disclose such a primer because Promega has not been cited against claim 3 and if it disclosed such a primer, it would have been. Accordingly, the Promega reference in no way suggests a kit containing the primers of the present invention. Thus, this rejection should be withdrawn.

Claim 7 was rejected under 35 USC 103 as being unpatentable over Lage et al. as applied to claims 3 and 6 in view of Vanin et al.

Applicants respectfully submit that for the reasons described above Lage does not teach or suggest the fragments of claims 3 and 6. Accordingly, the addition of Vanin in no way overcomes the deficiency of Lage. Accordingly, this rejection of the claims should be withdrawn.

Claims 46 and 47 were rejected under 35 USC 103(a) as being unpatentable over Lage as applied to claims 3 and 41 in view of Dattagupta et al.

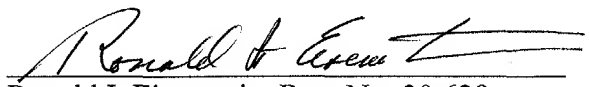
Applicants respectfully submit that for the reasons described above Lage does not teach or suggest the fragments of claims 3 and 41. Accordingly, the addition of Dattagupta does not in any way overcome this deficiency. Thus, this rejection should be withdrawn.

Applicants appreciate the Examiner's indication that the claim sequences of claims 2, 4, 12, 39, 40, 42, 43, 44 and 45 are novel and unobvious over the cited prior art and thus allowed. Applicants further submit that as a result of the Amendment to the claims, the incidental anticipation of one fragment has been obviated and thus this amendment should be entered as it places the case in condition for allowance.

In view of the foregoing, applicants respectfully submit that all claims are in condition for allowance. Early and favorable action is requested .

Respectfully submitted,

Date 11/26/02



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VERSION TO SHOW MARKED CHANGES IN CLAIMS

3. An isolated nucleotide segment of no more than 3000 nucleotides containing a fragment of at least [17] 25 contiguous nucleotides from the coding region as set forth in SEQ ID NO:1.

12. [The kit of claim 10, wherein said primers consist of the primers selected from the group consisting of SEQ IDs:3-50.]

A kit for determining an alteration in a mammalian MSH5 gene by DNA amplification comprising:

a set of DNA oligonucleotides primers in a vial, said set allowing synthesis of a DNA ending the DNA mismatch repair gene, wherein said primers are selected from the group consisting of SEQ ID NOS:3-50.

41. An isolated and purified nucleotide segment, wherein said nucleotide segment is a fragment of at least [17] 25 contiguous nucleotides of SEQ ID NO: 1, and wherein said nucleotide segment is mRNA or cDNA.